

Claims

5 1. A wiper system for vehicles, having at least one wiper lever linkage that has at least one wiper arm and that includes a first pivot lever, which can be coupled to a stationary first shaft in a manner fixed against relative rotation, and a second pivot lever that can be coupled to a stationary second shaft in a manner fixed against relative rotation, the pivot levers being connected in articulated fashion to a coupling element, characterized in that the coupling element (9) is embodied in multiple parts and has a first coupling part (11) and a second coupling part (13), which are coupled to one another with the aid of a joint (15).

10 2. The wiper system of claim 1, characterized by a drive device (41) for the wiper lever linkage (3), which device includes at least one first drive crank (43) that can be coupled in a manner fixed against relative rotation to the first shaft (21) or the second shaft (29).

15 3. The wiper system of claim 1, characterized in that the first drive crank (43) can be coupled to the first shaft (21) in a manner fixed against relative rotation, and that the drive device (41) has a second drive crank (45) that can be coupled in a manner fixed against relative rotation to the second shaft (29).

20 4. The wiper system of claim 1, characterized by a coupling member (47), which joins the first and second drive cranks (43, 45) to one another and which is coupled to the drive cranks (43, 45) via a respective joint (49, 51), and that at

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least one engine crank (59) is connected in articulated fashion to the first drive crank (43) or the second drive crank (45).

5        5. The wiper system of claim 1, characterized in that the first and second drive cranks (43, 45) are each connected in articulated fashion to a respective engine crank (59, 67).

10       6. The wiper system of claim 1, characterized in that the engine crank (59, 67) is displaceable transversely, or essentially transversely, to the first and second shafts (21, 29).

15       7. The wiper system of claim 1, characterized in that the second coupling part (13) is longer, preferably markedly longer, than the first coupling part (11).

20       8. The wiper system of claim 1, characterized in that the wiper arm (35) is secured to one of the first and second coupling parts (11, 13), preferably the longer coupling part (13).

25       9. The wiper system of claim 1, characterized in that the joints (17, 19) between the pivot levers (5, 7) and the coupling element (9) and the additional joint (15) between the coupling parts (11, 13) are embodied as cylindrical joints, whose pivot axes extend parallel to one another and preferably parallel to the first and second shafts (21, 29).

30       10. A method for operating a wiper lever linkage of a wiper system for vehicles, the wiper lever linkage having at least one wiper arm, in particular of claim 1, which wiper lever linkage includes a first pivot lever, which can be coupled to a stationary first shaft in a manner fixed against relative

rotation, a second pivot lever which can be coupled to a stationary second shaft in a manner fixed against relative rotation, a first drive crank which can be coupled to the first shaft in a manner fixed against relative rotation, a second drive crank which can be coupled to the second shaft in a manner fixed against relative rotation, and a coupling member connected in articulated fashion to the drive cranks, having the following steps:

- during one wiping cycle, the first and second drive cranks are first pivoted out of an outset position of the wiper lever linkage in the same direction until they are in an extended position, in which the coupling member and the first drive crank are aligned with one another;

- next, upon a displacement of the wiper lever linkage out of the extended position into a turning point position, the first drive crank is pivoted onward in the same direction and the second drive crank is pivoted onward in the opposite direction.

11. The method of claim 10, characterized in that the pivoting motions of the drive cranks are dependent on one another.